



STATE OF WASHINGTON
DEPARTMENT OF ECOLOGY

Northwest Regional Office • 3190 160th Ave SE • Bellevue, WA 98008-5452 • 425-649-7000

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Robert Anderson
Seattle Aquarium Society
1483 Alaskan Way
Seattle, WA 98101

RE: Water Quality Certification Order #8942 for U.S. Army Corps of Engineers Public Notice #NWS-2011-794, Seattle Aquarium—Pier 60 Promenade Repair/Replacement Project, in Seattle, King County, Washington

Dear Mr. Anderson:

On November 14, 2011, Seattle Aquarium Society submitted a Joint Aquatic Resource Permit Application (JARPA) to the Department of Ecology (Ecology) for a Section 401 Water Quality Certification (401 Certification) under the federal Clean Water Act for the proposed Seattle Aquarium—Pier 60 Promenade Repair/Replacement project.

On behalf of the State of Washington, Ecology certifies that the work described in the JARPA and the public notice complies with applicable provisions of Sections 301, 302, 303, 306 and 307 of the Clean Water Act, as amended, and applicable state laws. This certification is subject to the conditions contained in the enclosed Order.

If you have any questions, please contact Rebekah Padgett at (425) 649-7129. The enclosed Order may be appealed by following the procedures described in the Order.

Sincerely,

Geoff Tallent, Section Manager
Shorelands and Environmental Assistance Program

ES:rrp:cja

Enclosure

By certified mail: 7011 0470 0003 3720 9824

cc: Jacalen Printz, U.S. Army Corps of Engineers
Sally Fisher, Berger/ABAM
Laurel Kanawyer, Washington Department of Natural Resources
Laura Arber, Washington Department of Fish and Wildlife
e-cc: Joe Burcar – NWRO
Loree' Randall – HQ Raman Iyer – NWRO
ecyrefedpermits@ecy.wa.gov



IN THE MATTER OF GRANTING A) ORDER #8942
WATER QUALITY) Corps Reference #NWS-2011-794
CERTIFICATION TO) Seattle Aquarium—Pier 60 Promenade
SEATTLE AQUARIUM SOCIETY) Repair/Replacement Project; Elliott Bay, Seattle,
in accordance with 33 U.S.C. 1341) King County, Washington.
(FWPCA § 401), RCW 90.48.120, RCW)
90.48.260 and Chapter 173-201A WAC)

TO: Robert Anderson
Seattle Aquarium Society
1483 Alaskan Way
Seattle, WA 98101

On November 14, 2011, Seattle Aquarium Society submitted a Joint Aquatic Resources Permit Application (JARPA) to the Department of Ecology (Ecology) for a Section 401 Water Quality Certification. A joint public notice regarding the request was distributed by the U.S. Army Corps of Engineers (Corps) for the above-referenced project pursuant to the provisions of Chapter 173-225 WAC on November 25, 2011.

The promenade repair/replacement proposal includes:

- Removal of approximately 3,648 square feet of existing treated timber decking and approximately 102 10- to 12-inch-diameter creosote-treated timber piles
- Installation of approximately 4,520 square feet of concrete decking and 28 24-inch-diameter, hollow steel piles
- Placement of approximately 10 cubic yards of clean sand fill to cap holes left from pile removal

Mitigation will include removal of at least 1,308 square feet of timber decking and associated piling at Pier 60.

The project is located at 1483 (1501 & 1515) Alaskan Way, Seattle, King County, Washington, Elliott Bay, Section 31, T. 25 N., R. 4E., WRIA 8.

AUTHORITIES:

In exercising authority under 33 U.S.C. § 1341, RCW 90.48.120, and RCW 90.48.260, Ecology has examined this application pursuant to the following:

1. Conformance with applicable water quality-based, technology-based, and toxic or pretreatment effluent limitations as provided under 33 U.S.C. §§ 1311, 1312, 1313, 1316, and 1317 (FWPCA §§ 301, 302, 303, 306 and 307);
2. Conformance with the state water quality standards contained in Chapter 173-201A WAC and authorized by 33 U.S.C. § 1313 and by Chapter 90.48 RCW, and with other applicable state laws; and
3. Conformance with the provision of using all known, available and reasonable methods to prevent and control pollution of state waters as required by RCW 90.48.010.

WATER QUALITY CERTIFICATION CONDITIONS:

Through issuance of this Order, Ecology certifies that it has reasonable assurance that the activity as proposed and conditioned will be conducted in a manner that will meet the applicable water quality standards and other appropriate requirements of state law. In view of the foregoing and in accordance with 33 U.S.C. § 1341, RCW 90.48.120, RCW 90.48.260 Chapter 173-200 WAC and Chapter 173-201A WAC, water quality certification is granted to the Applicant subject to the conditions within this Order.

Certification of this proposal does not authorize the Applicant to exceed applicable state water quality standards (Chapter 173-201A WAC), ground water standards (Chapter 173-200 WAC) or sediment quality standards (Chapter 173-204 WAC). Furthermore, nothing in this certification shall absolve the Applicant from liability for contamination and any subsequent cleanup of surface waters, ground waters or sediments occurring as a result of project construction or operations.

A. General Conditions:

- A1. For purposes of this Order, the term "Applicant" shall mean Seattle Aquarium Society and its agents, assignees and contractors.
- A2. For purposes of this Order, all submittals required by its conditions shall be sent to Ecology's Northwest Regional Office, Attn: 401/CZM Federal Project Manager, 3190 160th Avenue SE, Bellevue, WA 98008-5452. Any submittals shall reference Order #8942 and Corps Reference #NWS-2011-794.
- A3. Work authorized by this Order is limited to the work described in the JARPA received by Ecology on November 14, 2011. The Applicant will be out of compliance with this Order and must reapply with an updated application if the information contained in the JARPA is voided by subsequent changes to the project not authorized by this Order.

- A4. Within 30 days of receipt of an updated JARPA, Ecology will determine if the revised project requires a new water quality certification and public notice or if a modification to this Order is required.
- A5. This Order shall be rescinded if the U.S. Army Corps of Engineers does not issue an individual Section 404 permit.
- A6. Copies of this Order shall be kept on the job site and readily available for reference by Ecology personnel, the construction superintendent, construction managers and lead workers, and state and local government inspectors.
- A7. The Applicant shall provide access to the project site and all mitigation sites upon request by Ecology personnel for site inspections, monitoring, necessary data collection, and/or to ensure that conditions of this Order are being met.
- A8. Nothing in this Order waives Ecology's authority to issue additional orders if Ecology determines that further actions are necessary to implement the water quality laws of the state. Further, Ecology retains continuing jurisdiction to make modifications hereto through supplemental order, if additional impacts due to project construction or operation are identified (e.g., violations of water quality standards, downstream erosion, etc.), or if additional conditions are necessary to further protect water quality.
- A9. The Applicant shall ensure that all appropriate project engineers and contractors at the project site have read and understand relevant conditions of this Order and all permits, approvals, and documents referenced in this Order. The Applicant shall provide Ecology a signed statement (see Attachment A for an example) from each project engineer and contractor that they have read and understand the conditions of this Order and the above-referenced permits, plans, documents and approvals. These statements shall be provided to Ecology before construction begins at the project or mitigation sites.
- A10. This Order does not authorize direct, indirect, permanent, or temporary impacts to waters of the state or related aquatic resources, except as specifically provided for in conditions of this Order.
- A11. Failure of any person or entity to comply with this Order may result in the issuance of civil penalties or other actions, whether administrative or judicial, to enforce its terms.

B. Mitigation Conditions:

- B1. The Applicant shall mitigate aquatic impacts as described in the following documents (hereafter together called the "Mitigation Plan"), or as modified by this Order or revised and approved by Ecology:
- *Seattle Aquarium Pier 60 Piling Replacement Project Mitigation Plan* prepared by BergerABAM, and dated April 5, 2012.
 - Transmittal Memorandum from Sally Fisher, BergerABAM, to Jacalen Printz, Rebekah Padgett, and Laura Arber, RE: Seattle Aquarium—Pier 60 Promenade Replacement (NWS-2011-794) Revised Mitigation Plan Figure, dated August 12, 2011.
- B2. Removal of a minimum of 1,308 square feet of timber decking and associated piles at Pier 60 shall occur within three (3) years of issuance of this Order.
- B3. The Applicant shall submit any changes to the Mitigation Plan in writing to Ecology per Condition A2 for review and approval before mitigation work begins.

C. Water Quality Condition:

- C1. Elliott Bay is classified as "Excellent Quality" and the criteria of that class apply except as specifically modified by this Order. This Order does not authorize temporary exceedances of water quality standards beyond the limits established in WAC 173-201A-210(1)(e)(i).
- C2. In-Water Construction Water Quality Sampling and Monitoring: A Water Quality Protection and Monitoring Plan (Plan) shall be developed and implemented. "In-water construction" is defined as all work below the ordinary high water mark of Elliott Bay.

The Plan shall include the following minimum requirements:

- a. Locations of samples: Locations of water quality sampling sites shall be identified and described in the Plan and on a map of the project area. At a minimum, sampling shall take place at the point of compliance as specified in WAC 173-201A-210(1)(e)(i), which allows a 150-foot temporary area of mixing for turbidity resulting from disturbance of in-place sediments in Elliott Bay. Background samples shall be collected outside the area of influence of the in-water work. Background samples shall be collected at the same frequency as the point of compliance samples.
- b. Number of samples: Number and frequency of water quality samples to be taken.

- c. Parameter to be sampled: Turbidity shall be sampled for this project.
- d. Equipment: Sampling for turbidity is to be accomplished using a turbidometer properly calibrated according to the operator's manual.
- e. Best Management Practices (BMPs): A description of the BMPs that will be used during construction to protect water quality.
- f. Detection of exceedances: Water quality standards for turbidity in "Excellent Quality" waters are as follows: turbidity shall not exceed 5 NTU over background conditions when the background is 50 NTU or less, or a 10 percent increase in turbidity when the background turbidity is more than 50 NTU. If exceedances of this standard at the point of compliance specified in WAC 173-201A-210(1)(e)(i) is detected through water quality sampling and monitoring, the Applicant shall immediately take action to stop, contain, and prevent unauthorized discharges or otherwise stop the violation and correct the problem. After such an event, the Applicant shall assess the efficacy of the site BMPs and update or improve the BMPs used at the work site in an effort to reduce or prevent recurrence of the turbidity exceedance.
- g. Reporting: If no exceedances are detected, results of water quality sampling, as determined by the Plan, shall be forwarded to Ecology on a monthly basis in accordance to Condition A2.
- h. Notification of exceedances: Notification of exceedances that are detected through water quality sampling shall be made to Ecology within 24 hours of occurrence. Notification shall be made with reference to Order #8942, Attn: 401/CZM Federal Project Manager, by telephone at (425) 649-7129 or (425) 649-7000, or by fax to (425) 649-7098. The Applicant shall, at a minimum, provide Ecology with the following information:
 - i. A description of the nature and cause of exceedance.
 - ii. The period of non-compliance, including exact dates, duration, and times and/or the anticipated time when the Applicant will return to compliance.
 - iii. The steps taken, or to be taken, to reduce, eliminate, and prevent recurrence of the non-compliance.
 - iv. In addition, within five (5) days after notification of an exceedance, the Applicant shall submit a written report to Ecology that describes the nature of the exceedance, turbidity results and location, photographs, and any other pertinent information.

D. Conditions for Construction Activities:

General Conditions:

- D1. Construction stormwater, sediment, and erosion control best management practices (BMPs; e.g., filter fences, etc.) suitable to prevent exceedances of state water quality standards shall be in place before starting construction at the site.
- D2. Sediment and erosion control measures shall be inspected and maintained prior to and during project implementation.
- D3. All construction debris shall be properly disposed of on land so that it cannot enter a waterway or cause water quality degradation to state waters.
- D4. Machinery and equipment used during construction shall be serviced, fueled, and maintained upland, unless otherwise approved by Ecology, in order to prevent contamination to any surface water.
- D5. Wash water containing oils, grease, or other hazardous materials resulting from wash down of equipment or working areas shall be contained for proper disposal, and shall not be discharged into state waters or storm drains.
- D6. Clean Fill Criteria: Applicant shall ensure that fill (sand) placed for the proposed project does not contain toxic materials in toxic amounts.
- D7. Work in or near the water that may affect fish migration, spawning, or rearing shall cease immediately upon a determination by Ecology that fisheries resources may be adversely affected.
- D8. During project demolition or construction, a containment boom and absorbent pads shall be placed around the perimeter of the work area to capture wood debris and other materials released into the waters as a result of construction activities. All accumulated debris shall be collected and disposed of upland at an approved disposal site.
- D9. The Applicant shall use tarps or other containment method when cutting or drilling over water to prevent debris, sawdust, concrete and asphalt rubble, and other materials from entering the water.
- D10. During construction, the Applicant shall have a boat available on site at all times to retrieve debris from the water.

- D11. All manmade debris that has been deposited below the Ordinary High Water Line within the construction work area shall be removed and disposed of upland such that it does not enter waters of the state. Concrete rubble, metal debris, and other debris in the construction work corridor that have washed into marine areas shall be removed from the project area.
- D12. Project activities shall be conducted to minimize siltation of the beach area and bed.
- D13. The Applicant shall operate the barge(s) and tug in deep water so as to minimize nearshore propeller wash impacts such as suspension of nearshore sediments.
- D14. Barges shall not be allowed to ground-out during construction.
- D15. If cast in place, wet concrete/grout shall be prevented from entering waters of the state. Forms for any concrete/grout structure shall be constructed to prevent leaching of wet concrete/grout. Impervious materials shall be placed over any exposed concrete/grout not lined with the forms that will come in contact with state waters. Forms and impervious materials shall remain in place until the concrete/grout is cured.
- D16. In-water work shall be conducted in the fall and winter in order to minimize impacts to bull kelp and other aquatic vegetation.
- D17. Aquatic vegetation (eelgrass and kelp) shall be observed for presence prior to construction. If eelgrass and/or kelp are present, the boundaries shall be marked with floats, buoys, or other means as appropriate in order to restrict access and anchoring during construction.
- D18. In-water work barges shall not be allowed to anchor in areas where aquatic vegetation is present.
- D19. In-water work barges shall not be allowed to continuously shade any aquatic vegetation for more than 24 hours.

Piling Removal Conditions:

- D20. Approximately 102 existing creosote-treated timber piles shall be removed from marine waters. All piling shall be removed by vibratory extraction or barge-mounted/land-based crane.
- D21. Piles, stubs, debris, and all associated excavated sediments shall be contained and prevented from entering waters of the state.

- D22. Piles removed from substrate: the pile shall be moved immediately from the water into the barge or onto uplands. The pile shall not be shaken, hosed-off, left hanging to drip or any other action intended to clean or remove adhering material from the pile.
- D23. Work surface on the barge deck or on uplands shall include a containment basin for piles and any sediment removed during pulling of the piling. Basins may be constructed of durable plastic sheeting with sidewalls supported by hay bales or support structure to contain all sediment.
- D24. The piles and any sediment removed during pulling of the piling shall be disposed of at an approved upland disposal site.

Pile Driving:

- D25. The new pilings shall be steel.
- D26. The steel pilings shall be installed using a vibratory hammer whenever possible. An impact hammer may be used to proof pile, if needed.

E. Emergency/Contingency Measures:

- E1. The Applicant shall develop and implement a Spill Prevention and Containment Plan for all aspects of this project.
- E2. The Applicant shall have adequate and appropriate spill response materials on hand to respond to emergency release of petroleum products or any other material into waters of the state.
- E3. Fuel hoses, oil drums, oil or fuel transfer valves and fittings, etc., shall be checked regularly for drips or leaks, and shall be maintained and stored properly to prevent spills into state waters.
- E4. Any work that is out of compliance with the provisions of this Order, or conditions causing distressed or dying fish, or any discharge of oil, fuel, or chemicals into state waters, or onto land with a potential for entry into state waters, is prohibited. If these occur, the Applicant shall immediately take the following actions:
 - a. Cease operations at the location of the violation or spill.
 - b. Assess the cause of the water quality problem and take appropriate measures to correct the problem and/or prevent further environmental damage.

- c. Notify Ecology of the failure to comply. All oil spills shall be reported immediately to Ecology's 24-Hour Spill Response Team at 1-800-258-5990, **and** within 24 hours of spills or other events to Ecology's 401/CZM Federal Project Manager at (425) 649-7129 or (425) 649-7000.
- d. Submit a detailed written report to Ecology within five (5) days that describes the nature of the event, corrective action taken and/or planned, steps to be taken to prevent a recurrence, results of any samples taken, and any other pertinent information.

Compliance with this condition does not relieve the Applicant from responsibility to maintain continuous compliance with the terms and conditions of this Order or the resulting liability from failure to comply.

F. Timing Requirements

- F1. This Order expires five (5) years from the date of issuance of the Corps permit.

G. Reporting and Notification Requirement Conditions

- G1. The Applicant shall provide to Ecology's 401/CZM Federal Permit Manager a copy of the final Corps permit within 2 weeks of receipt of the permit. A copy shall be submitted per condition A2 above.
- G2. Applicant shall provide notice to Ecology's 401/CZM Federal Project Manager at least three (3) days prior to the start of construction and within 14 days after completion of construction at the project site. Notification, referencing Corps Reference #NWS-2011-794, Order #8942 can take place by telephone to (425) 649-7129 or (425) 649-7000, fax to (425) 649-7098, or in writing.
- G3. If the project construction is not completed within 13 months of issuance of this Order, the Applicant shall submit per Condition A2 a written construction status report and submit status reports every 12 months until construction is complete.

YOUR RIGHT TO APPEAL

You have a right to appeal this Order to the Pollution Control Hearing Board (PCHB) within 30 days of the date of receipt of this Order. The appeal process is governed by Chapter 43.21B RCW and Chapter 371-08 WAC. "Date of receipt" is defined in RCW 43.21B.001(2).

To appeal you must do all of the following within 30 days of the date of receipt of this Order:

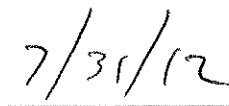
- File your appeal and a copy of this Order with the PCHB (see addresses below). Filing means actual receipt by the PCHB during regular business hours.
- Serve a copy of your appeal and this Order on Ecology in paper form - by mail or in person. (See addresses below.) E-mail is not accepted.

You must also comply with other applicable requirements in Chapter 43.21B RCW and Chapter 371-08 WAC.

ADDRESS AND LOCATION INFORMATION

Street Addresses	Mailing Addresses
Department of Ecology Attn: Appeals Processing Desk 300 Desmond Drive SE Lacey, WA 98503	Department of Ecology Attn: Appeals Processing Desk PO Box 47608 Olympia, WA 98504-7608
Pollution Control Hearings Board 1111 Israel RD SW STE 301 Tumwater, WA 98501	Pollution Control Hearings Board PO Box 40903 Olympia, WA 98504-0903


Geoff Tallent, Section Manager
Shorelands and Environmental Assistance Program
Northwest Regional Office


July 31, 2012

ATTACHMENT A

**SEATTLE AQUARIUM SOCIETY
SEATTLE AQUARIUM—PIER 60 PROMENADE
REPAIR/REPLACEMENT PROJECT
Water Quality Certification Order #8942**

**Statement of Understanding of
Water Quality Certification Conditions**

I have read and understand the conditions of Order #8942 Section 401 Water Quality Certification for the Seattle Aquarium Society Seattle Aquarium—Pier 60 Promenade Repair/Replacement Project. I have also read and understand all permits, plans, documents, and approvals associated with the project referenced in this Order.

Signature

Date

Title

Company